Prof. Christophe Durand

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After a Ph.D in Physics and a post-doctoral position at INRS (Canada) focused on high-k and ferroelectric oxides, Christophe Durand joined the Université Grenoble Alpes (UGA) in 2006 as Associate Professor. He works at the PHELIQS laboratory at the CEA-Grenoble to develop the MOVPE growth of III-N nitride semiconductors. His research focuses on the growth of GaN nano/micro-wires for the development of new optoelectronic devices. In the decade 2010-20, he developed novel wire-based devices operating in the visible spectral range using core-shell InGaN quantum wells with demonstrations of µLEDs, LED on Si, photodetectors and solar cells.

His current research activities focus on UV emission based on microwires with core-shell AlGaN quantum wells with the aim of developing UV µLED technologies. In parallel, he investigates the use of microwire arrays for fabricating of novel flexible optoelectronic devices, including blue/green/white LEDs, UV-LEDs and photodetectors.

He has established international collaborations with the EPFL, the Tyndall Institute, the University of Lisbon and the University of St Petersburg. He is the co-author of 75 peer-reviewed journal articles, 3 patents, 1 book chapter and has given 15 invited talks.